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# (12) United States Patent McCord et al.

# (54) PAPER MICROFLUIDIC DEVICES FOR DETECTION OF IMPROVISED EXPLOSIVES

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(58) Field of Classification Search

USPC ......149/109.4, 109.6 See application file for complete search history.

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## (57) ABSTRACT

Paper microfluidic devices for testing for explosives are provided, along with methods of fabricating and using the same. One or more channels are formed on a paper substrate, and a test spot is formed in at least one of the channels. The channels can be hydrophobic. A test reagent is provided in the test spot and tests for explosives.

### 4 Claims, 10 Drawing Sheets

PAPER WITH PATTERNS (E.G. PHOTORESIST PATTERNS)

